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10/648,341

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Kazushi Tahara

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EXAMINER

WEST, JEFFREY R

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/648,341

Applicant(s)

TAHARA ET AL.

Examiner

Jeffrey R. West

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/01/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

2. A reference to the prior application must be inserted as the first sentence of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e) or 120. See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. Also, the current status of all nonprovisional parent applications referenced should be included.

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of

the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

### ***Drawings***

3. The drawing in Figure 2 is objected to because it does not have sufficiently descriptive labels. Blank boxes in drawings should be labeled descriptively unless it is a well-known component.
4. The drawing in Figure 5 is objected to because the "COMPARING SECTION" is incorrectly labeled "232" instead of "252" and the "JUDGING SECTION" is incorrectly labeled "234" instead of "254", as they are described on page 24 of the specification.
5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any

required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

6. The abstract of the disclosure is objected to because in line 6, "stores a allowable limit" should be ---stores an allowable limit---. Correction is required. See MPEP § 608.01(b).

7. The specification is objected to because it contains several unclear passages, for example:

"In this specification, a term 'part' is used for specifying a thing that constitutes a part of a semiconductor processing system" (page 1).

"Therefore, unless they are sufficiently stabilized, its operation speed is made slower and mechanical reliability would be lowered, and it becomes hard for the system to display its full ability and performance adequately. Furthermore, in case the system is once broken down, it cannot help being stopped for a long time for restoration thereof, which would worsen the throughput of the semiconductor device production" (page 2).

"However, in case of the judgment of the part condition relying on the check of the accumulated operation time and the number of operation times, it has not always coincided with presence of the actual abnormal condition in the system. For instance, it actually happens that some parts break down before they reach their

prescribed operation time and/or the number of operation times while some others normally work well even exceeding their prescribed operation time and/or the number of operation times. Accordingly, it has been desired to establish not the judgment standard relying only on the accumulated operation time and/or the number of operation times, but the judgment standard much more reasonably meeting the actual part operation" (page 3).

"Further, since it is possible to previously order parts, the parts can be exchanged before it becomes necessary to stop the semiconductor processing system" (page 6).

"By such a processing, a user knows abnormal state, and can stop the device to avoid danger and thus or obtain parts to be exchanged beforehand, it is possible to maintain the throughput without stopping the device for a long time" (page 7).

Applicant is requested to correct these and any other grammatical issues present in the specification.

8. The disclosure is objected to because of the following informalities:

On page 23, references to buttons "save", "exit" and "cancel" should be changed to ---store---, ---end---, and ---discontinue---, respectively, to be in accordance with Figure 10.

On page 29, line 9, "step S19" should be ---step S190---.

On page 44, line 14 to page 45, line 1, references to "factory-side server 120" and "vendor-side server 420" should be changed to ---factory-side transmit/receive

server 120--- and ---vendor-side transmit/receive server 420---, respectively, to be in accordance with Figure 14

Appropriate correction is required.

### ***Claim Objections***

9. Claims 1, 3, 4, 6, 11-14, 16 and 17 are objected to because of the following informalities:

In claim 1, line 9, "a allowable" should be ---an allowable---. A similar change should be made to claim 11, line 8.

In claim 1, line 10, to avoid problems of antecedent basis, "the number of operations" should be ---a number of operations---. A similar change should be made to claim 11, line 9.

In claim 1, lines 12-13, to avoid problems of antecedent basis, "the number of actual operations" should be ---a number of actual operations---. A similar change should be made to claim 11, lines 11-12.

In claim 1, lines 19-20, reference is made to "said judgment", however, there is no specific mention of any judgment presented. To avoid problems of antecedent basis, it is suggested that on line 16, "to judge an operation" be changed to something similar to ---to form a judgment of an operation---. A similar change should be made to claim 11, line 16.

In claim 1, line 26, "that part" should be ---said part---.

In claim 3, line 3, "estimates time period" should be ---estimates a time period---.



In claim 3, line 6, "that time period" should be ---said time period---. A similar change should be made to claim 13, lines 6 and 8.

In claim 4, line 3, "time period" should be ---said time period---. A similar change should be made to claim 14, line 3.

In claim 4, line 6, "that time period" should be ---said time period---. A similar change should be made to claim 14, line 6.

In claim 4, lines 10-11, "that time period" should be ---said time period---. A similar change should be made to claim 14, lines 10-11.

In claim 6, line 4, "a counter" should be ---said counter---. A similar change should be made to claim 16, lines 3-4.

In claim 11, line 19, to avoid problems of antecedent basis, "said network" should be ---said bidirectional network---.

In claim 11, line 21, to avoid problems of antecedent basis, "the order processing" should be ---the order processing request---.

In claim 11, line 24, to avoid problems of antecedent basis, "said network" should be ---said bidirectional network---.

In claim 12, line 4, "at least two" should be ---at least a two---.

In claim 12, line 8, to avoid problems of antecedent basis, "said network" should be ---said bidirectional network---.

In claim 13, line 3, "estimates time period" should be ---estimates a time period---

In claim 13, lines 11 and 13, to avoid problems of antecedent basis, "network" should be ---bidirectional network---.

In claim 14, lines 13-14, to avoid problems of antecedent basis, "said network" should be ---said bidirectional network---.

In claim 17, line 13, to avoid problems of antecedent basis, "said network" should be ---said bidirectional network---.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-10, 13, 14, 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is considered to be vague and indefinite because lines 10-11 refer to "said present semiconductor processing system" while there is only a previous mention a "semiconductor processing system". Therefore, it is unclear to one having ordinary skill in the art as to what "said preset semiconductor processing system" refers.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph because line 4 recites, "until the level reaches a next time limit value". Parent claim 2, however, already defines "a next time limit value". Therefore, it is unclear to one having

ordinary skill in the art whether “a next time limit value” in claim 3 refers to the same “next time limit value”, as presented in claim 2, or a different next time limit value. Further, it is unclear to one having ordinary skill in the art as to what value “the level” refers.

Claim 3 is also considered to be vague and indefinite because it refers to “the exchange of the part into a next periodic maintenance schedule” while there is no previous mention of any such “exchange”. Therefore, it is unclear to one having ordinary skill in the art as to what “the exchange” refers.

Claim 3 is further considered to be vague and indefinite because it recites, “renews said periodic maintenance schedule”, while there is no previous mention of any “periodic maintenance schedule”. Therefore, it is unclear to one having ordinary skill in the art whether “said periodic maintenance schedule” refers to the previously presented “periodic maintenance”, “maintenance schedule information” or “next periodic maintenance schedule”.

Claim 4 is considered to be vague and indefinite because lines 5-8 recite, “and if the vendor-side system judges that the part can not be prepared by that time period, the vendor-side system judges that the maintenance of the part can meet the requirement”. First, it is unclear as to what “the maintenance” refers since parent claims 1-3 refer to “periodic maintenance”, “maintenance schedule information”, and “a next periodic maintenance schedule”. Second, there is no mention of any requirement in parent claims 1-3 and therefore, one having ordinary skill in the art does not understand what requirement must be met. Finally, written in this manner,

it is unclear to one having ordinary skill in the art whether the step of "the vendor-side system judges that the maintenance of the part can meet the requirement" is part of the conditional statement, or is subject to the conditional statement.

Claim 4 is considered to be vague and indefinite because in lines 9-10, reference is made to "the next semiconductor processing system" while there is no previous mention of any "next semiconductor processing system". Therefore, it is unclear to one having ordinary skill in the art as to what "the next semiconductor processing system" refers.

In claim 4, line 12, it is also unclear whether "a next periodic maintenance schedule" refers to the previously presented "next periodic maintenance schedule" or a different "next periodic maintenance schedule". It is suggested that if this reference is to refer to the previously presented "next periodic maintenance schedule", that, on line 12, "a next periodic maintenance schedule" be changed to ---said next periodic maintenance schedule---

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, because it recites "the preset means of said factory-side system stores normal operation time and its allowable limit value instead of a allowable limit value of the operation time or the number of operations of said part". Parent claim 1, however, includes a limitation specifying "a preset means which stores a allowable limit value of operation time or the number of operations of a part". Therefore, claim 7 fails to further limit claim 1 but instead provides a limitation contradictory to what is required by claim 1.

Therefore, claim 7 does not particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Similarly, claim 8 is rejected as being vague and indefinite because it recites "the preset means of said factory-side system stores time-passage change and its allowable limit value instead of a allowable limit value of the operation time or the number of operations of said part, said measuring means of said factory-side system measures time-passage change of the actual operation of said part instead of the actual operation time or the number of actual operations of said part". Similar to the claim 7, claim 8 fails to further limit claim 1 but instead provides limitations contradictory to what is required by claim 1.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph because line 4 recites, "until the level reaches a next time limit value". Parent claim 12, however, already defines "a next time limit value". Therefore, it is unclear to one having ordinary skill in the art whether "a next time limit value" in claim 13 refers to the same "next time limit value", as presented in claim 12, or a different next time limit value. Further, it is unclear to one having ordinary skill in the art as to what value "the level" refers.

Claim 13 is also considered to be vague and indefinite because it refers to "the exchange of the part into a next periodic maintenance schedule" while there is no previous mention of any such "exchange". Therefore, it is unclear to one having ordinary skill in the art as to what "the exchange" refers.

Claim 13 is further considered to be vague and indefinite because it recites, "renews said periodic maintenance schedule", while there is no previous mention of any "periodic maintenance schedule". Therefore, it is unclear to one having ordinary skill in the art whether "said periodic maintenance schedule" refers to the previously presented "periodic maintenance", "maintenance schedule information" or "next periodic maintenance schedule".

Claim 14 is further considered to be vague and indefinite because lines 5-8 recite, "and if the vendor-side system judges that the part can not be prepared by that time period, the vendor-side system judges that the maintenance of the part can meet the requirement". First, it is unclear as to what "the maintenance" refers since parent claims 1-3 refer to "periodic maintenance", "maintenance schedule information", and "a next periodic maintenance schedule". Second, there is no mention of any requirement in parent claims 1-3 and therefore, one having ordinary skill in the art does not understand what requirement must be met. Finally, written in this manner, it is unclear to one having ordinary skill in the art whether the step of "the vendor-side system judges that the maintenance of the part can meet the requirement" is part of the conditional statement or is subject to the conditional statement.

Claim 14 is considered to be vague and indefinite because in lines 9-10, reference is made to "the next semiconductor processing system" while there is no previous mention of any "next semiconductor processing system". Therefore, it is

unclear to one having ordinary skill in the art as to what "the next semiconductor processing system" refers.

In claim 14, line 12, it is also unclear whether "a next periodic maintenance schedule" refers to the previously presented "next periodic maintenance schedule" or a different "next periodic maintenance schedule". It is suggested that if this reference is to refer to the previously present "next periodic maintenance schedule", that, on line 12, "a next periodic maintenance schedule" be changed to ---said next periodic maintenance schedule---.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, because it recites "said factory-side system stores normal operation time and its allowable limit value instead of a allowable limit value of the operation time or the number of operations of said part". Parent claim 11, however, includes a limitation for "presetting a allowable limit value of operation time or the number of operations of said semiconductor processing system". Therefore, claim 17 fails to further limit claim 11 but instead provides a limitation contradictory to what is required by claim 11. Therefore, claim 17 does not particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Similarly, claim 18 is rejected as being vague and indefinite because it recites "said factory-side system stores time-passage change and its allowable limit value instead of a allowable limit value of the operation time or the number of operations of said part, said factory-side system measures time-passage change of the actual operation of said part instead of the actual operation time or the number of actual

operations of said part". Similar to the claim 17, claim 18 fails to further limit claim 11 but instead provides limitations contradictory to what is required by claim 11.

Claims 2, 5, 6, 9, and 10 are rejected under 35 U.S.C. 112, second paragraph, because they incorporate the lack of clarity present in parent claim 1.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-3, 7-13, 17, and 18, as may best be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2001/0032109 to Gonyea et al. in view of U.S. Patent No. 6,608,666 to Deguchi et al.

Gonyea discloses a part maintenance system comprising a factory-side system having at least one processing system (0013, lines 1-9), a preset means which stores an allowable limit value of operation time or the number of operations of a part of said processing system (0020, lines 1-5), a measuring means which measures actual operation time or the number of actual operations of said part (0021, lines 10-13), and a maintenance judging means which compares said actual operation time or the number of actual operations and said allowable limit value with each other to judge an operation state of said part (0005, lines 14-21), wherein said



factory-side system comprises a factory-side sending/receiving means (0015, lines 5-7 and 0017, lines 7) which sends an order processing request of said part to a vendor in accordance with a result of said judgment (0005, lines 14-21 and 0055, lines 1-13) wherein the vendor comprises an order processing means which carries out an order processing of a part when said vendor-side sending/receiving means receives an order processing request of that part from said factory-side system (0056, lines 1-11).

Gonyea also discloses said factory-side system stores at least two stage limit value levels as said allowable limit value which is previously set by said preset means (0050, lines 1-2), and when said maintenance judging means judges that said actual operation time or the number of actual operations reaches a first limit value level, said factory-side sending/receiving means sends an order processing request for repairing said part (0050, lines 2-15), and when said actual operation time or the number of actual operations reaches a next limit value level, said factory-side system carries out a notice processing indicating that the part needs to be replaced (0051, lines 15-21).

Gonyea also discloses that the factory-side system estimates time period required until the level reaches a next limit value level and if said factory-side system judges that the part can be prepared by that time period and a periodic maintenance of said semiconductor processing system is scheduled by that time period, maintenance schedule information for inputting the exchange of the part into a next

periodic maintenance schedule is input into the next periodic maintenance schedule and renews said periodic maintenance schedule (0027, lines 29-37).

With respect to claims 7 and 8, Gonyea discloses that the preset means of said factory-side system stores normal operation time and its allowable limit value for comparison, in order to perform estimation, (0021, lines 13-16) or cumulative time-passage change and its allowable limit value for comparison (0027, lines 9-11).

As noted above, the invention of Gonyea teaches many of the features of the claimed invention and while the invention of Gonyea does teach a wide variety of processing systems as well as communication to and from a vendor, Gonyea does not specifically indicate that the system be a semiconductor processing system and that the vendor be part of a vendor-side system owned by an administrator who manages the maintenance of said semiconductor processing system comprising a vendor-side sending/receiving means which sends and receives information to and from said factory-side system through a network.

Deguchi teaches a semiconductor device manufacturing factory (column 1, lines 11-15) comprising a factory-side system (column 6, lines 10-45) and a vendor-side system owned by an administrator who manages the maintenance of said semiconductor processing system (column 6, lines 18-21) wherein the factory-side system and vendor-side systems each contain corresponding servers and sending/receiving means (column 6, lines 30-39 and 45-54) that send and receive information between each other through a bidirectional network (column 6, lines 54-65). Deguchi also teaches that the vendor-side system receives information from

the factory-side system and uses such information to perform maintenance processing (column 6, lines 54-65).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gonyea to specifically indicate that the system be a semiconductor processing system and that the vendor be part of a vendor-side system comprising a vendor-side sending/receiving means which sends and receives information to and from said factory-side system through a network, as taught by Deguchi, because the combination would have allowed greater utility in the invention of Gonyea by providing application to a wider variety of environments and, as suggested by Deguchi, provided a corresponding means for communicating with the vendor of Gonyea with improved accessibility by allowing access to the vendor remotely (column 7, lines 10-22) while allowing remote monitoring to provide rapid problem correction (column 7, lines 46-52).

Further, it has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim (See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963)). In the instant case, the structure of Gonyea is capable of performing the monitoring of any of a plurality of processing systems including a semiconductor processing system, and therefore meets the claimed limitation.

Also, since Gonyea teaches that the factory-side performs the maintenance scheduling operation rather than the vendor-side and Deguchi teaches remote maintenance by the vendor-side, the combination would have performed the maintenance scheduling operation of Gonyea at the vendor-side.

Further still, with respect to claims 9 and 10, the invention of Gonyea and Deguchi teaches the use of servers in both the factory and vendor sides and since it has been held that forming in one piece an article which was formerly been formed in two pieces and put together involves only routine skill in the art (See *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893)), it would have been obvious to one having ordinary skill in the art to combine the plurality of processing means into the servers to reduce the number of components required, thereby increasing efficiency.

14. Claims 5 and 15, as may best be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonyea et al. in view of Deguchi and further in view of U.S. Patent No. 4,404,641 to Bazarnik.

As noted above, the invention of Gonyea and Deguchi teaches many of the features of the claimed invention, and while the invention of Gonyea and Deguchi does teach a factory-side system that determine a cumulative operation time of a part for comparison with a two stage limit, the combination does not specifically indicate that the cumulative operation time is determined by a counter for the part.

Bazarnik teaches a maintenance monitor that automatically advises that maintenance of a device should be undertaken (column 1, lines 5-8) including a

counter corresponding to a specific part (column 1, lines 66-68) wherein the counter accumulates operation time for comparison to a two stage limit (column 2, lines 3-9).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gonyea and Deguchi to specifically indicate that the cumulative operation time is determined by a counter for the part, as taught by Bazarnik, because Bazarnik suggests a well-known means for accumulating time that would be required to determine the accumulated time in the invention of Gonyea and Deguchi as well as reduce the occurrence of machine damage by disabling the machine when the maintenance must be performed (column 1, lines 54-61 and column 2, lines 3-9).

15. Claims 6 and 16, as may best be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonyea et al. in view of Deguchi and Bazarnik and further in view of JP Patent Application Publication No. 2000-012412 to Makitani.

As noted above, Gonyea in combination with Deguchi and Bazarnik teaches many of the features of the claimed invention including a measuring means for measuring the actual operation time of a part by a counter corresponding to said part, but does not specifically indicate that the operation time be that of a driving means that drives said part.

Makitani teaches a method and device for monitoring performance of a semiconductor producing device including means for monitoring the operating time or number of operations (0017) of a driving means that drives a part (0010).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gonyea, Deguchi, and Bazarnik to specifically indicate that the operation time be that of a driving means that drives said part, as taught by Makitani, because the invention of Gonyea, Deguchi, and Bazarnik does teach monitoring a semiconductor production facility and Makitani suggests that part driving means are critical components for correct operation of a semiconductor production facility (0002-0005) and therefore, the combination would have provided improved monitoring and maintenance of a semiconductor facility by monitoring a wider variety of components including the crucial driving means.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

U.S. Patent No. 6,438,440 to Hayashi teaches a method and system for managing semiconductor manufacturing equipment.

U.S. Patent No. 6,311,093 to Brown teaches a system and method for simulation modeling and scheduling of equipment maintenance and calibration in biopharmaceutical batch process manufacturing facilities.

U.S. Patent No. 6,385,497 to Ogushi et al. teaches a remote maintenance system.

U.S. Patent Application Publication No. 2002/0139988 to Kato teaches a vibration isolator, device manufacturing apparatus and method, semiconductor manufacturing plant and method of maintaining device manufacturing apparatus.

U.S. Patent Application Publication No. 2003/0229550 to DiPrima et al. teaches a system and method for planning and ordering components for a configure-to-order manufacturing process.

FOLDOC, Free On-Line Dictionary of Computing provides the definition of server as "a computer which provides some service for other computers connected to it via a network".

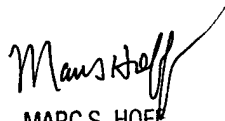
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (571)272-2226. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jr  
January 9, 2005

  
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